

Abstract

An optical recording medium 10 having a substrate 11, an optically transparent layer 12, and a first dielectric layer 31, a noble metal oxide layer 23, a second dielectric layer 32, a light absorbing layer 22, a third dielectric layer 33 and a reflecting layer 21 which are disposed between the optically transparent layer 12 and the substrate 11, records and reproduces data into and from the optical recording medium 10 by irradiating the optical recording medium 10 with a laser beam 40 from the optically transparent layer 12 side. λ/NA is set to be not longer than 640 nm when λ designates a wavelength of the laser beam 40 and NA designates a numerical aperture of an objective lens, and setting is done as $P_w \times 0.1 \leq P_r \leq P_w \times 0.5$ when P_w and P_r designate recording power and reproducing power of the laser beam 40 respectively, while a recording mark train including recording marks each having a length not larger than $\lambda/4NA$ is recorded and data are reproduced from the recording mark train.